

§103(a) as being unpatentable over U.S. Patent No. 6,350,120 to Sachdeva et al. (hereinafter referred to as “the Sachdeva et al. ‘120 patent”) in view of U.S. Patent No. 5,338,198 to Wu et al. (hereinafter referred to as “the Wu et al. ‘198 patent”); rejected claims 27 – 49 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,870,158 to Doyle et al. (hereinafter referred to as “the Doyle et al. ‘158 patent”) in view of the Wu et al. ‘198 patent; and rejected claims 50 – 54 under 35 U.S.C. §103(a) as being unpatentable over the Doyle et al. ‘158 patent in view of the Wu et al. ‘198 patent and a publication to Guess et al. entitled *Computer Treatment Estimates in Orthodontics and Orthognathic Surgery* (hereinafter referred to as “the Guess et al. publication”).

By this Response, the rejections to independent claims 27 and 50 and the rejections to the claims dependent thereon have been traversed.

It is respectfully submitted that no new matter within the meaning of 35 U.S.C. §132 has been introduced to this application.

### **Rejections Under 35 U.S.C. §103(a)**

To establish a *prima facie* case of obviousness, the Examiner must establish: (1) some suggestion or motivation to modify the references exists; (2) a reasonable expectation of success; and (3) the prior art references teach or suggest all of the claim limitations. *Amgen, Inc. v. Chugai Pharm. Co.*, 18 USPQ2d 1016, 1023 (Fed. Cir. 1991); *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 USPQ 494, 496 (CCPA 1970).

#### **1. The Sachdeva et al. ‘120 Patent In View of the Wu et al. ‘198 Patent**

The Examiner rejected claims 27 – 54 as being unpatentable over the Sachdeva et al. ‘120 patent in view of the Wu et al. ‘198 patent. The Examiner suggested filing a translation of the

present application's priority document no. PCT/IL98/00593 to establish that the presently claimed invention is supported thereby.

### **Response**

By this Response, Applicants have submitted, in an Appendix to this paper, a copy of World Intellectual Property Organization (WIPO) document no. PCT/IL98/00593 (hereinafter referred to as "the '593 PCT application"), which was published in English. Applicants respectfully traverse the Examiner's rejection since the '593 application pre-dates the cited primary reference. Support for the presently claimed invention can be found on page 11, lines 16 – 22 of this document. Therefore, the present application pre-dates the cited primary reference thereby making the cited primary reference improper.

The Sachdeva et al. '120 patent was published on February 26, 2002 and has a filing date of November 30, 1999. Although the present application has a filing date of January 2, 2004, it claims priority to the '593 PCT application, which was filed on December 7, 1998, which further claims priority back to Israeli application no. 122807, which was filed on December 30, 1997. Thus, since the '593 PCT application and Israeli application were respectively filed one and two years before the cited primary reference—the Sachdeva et al. '120 patent—this patent is not a proper reference and the Wu et al. '198 patent cannot be combined with it to render the presently claimed invention obvious.

Should the Examiner wish to confirm the chain of priority, Applicants set forth that:

- The '593 PCT application was filed on December 7, 1998 and designated the United States. The '593 PCT application properly claimed priority to Israeli application no.

122807 filed on December 30, 1997 in Israel, as demonstrated on the first page of the published international application, which was filed in English and published on July 15, 1999. Applicants submit that no translation of the '593 PCT application is required to be submitted in the present application, as the '593 PCT application was filed and published in English.

- U.S. Patent Application No. 09/591,757 (hereinafter referred to as "the Taub et al. '757 application") was filed under 35 U.S.C. 111(a) as a continuation of the '593 PCT application. The Taub et al. '757 application was filed on June 12, 2000, within 30 months of December 30, 1997 (the priority date of the '593 PCT application). The Taub et al. '757 application included specific reference to the '593 PCT application and to Israeli application no. 122807 in the first sentence of its specification.

Applicants hereby certify that the '593 PCT application was not withdrawn or considered to be withdrawn, either generally or as to the United States, prior to the filing date of the Taub et al. '757 application claiming benefit under 35 U.S.C. 120 and 365(c) to the '593 PCT application. Applicants further have included, as an appendix to this response, signed copies of form PCT/IPEA/402, the "Receipt of Demand by Competent International Preliminary Examining Authority," and form PCT/IB/332, "Information Concerning Elected Offices Notified of Their Election," from the '593 PCT application, proving that a demand electing the United States was filed within 19 months from the priority date of the '593 PCT application;

- The Present Application was filed on January 2, 2004 under 35 U.S.C. 111(a) as a continuation of the Taub et al. '757 application, while the Taub et al. '757 application

was pending. The Present Application includes specific reference to the Taub et al. '757 application, the '593 PCT application, and to Israeli application no. 122807 in the first sentence of its specification.

Therefore, the present application properly claims the benefit of the '593 PCT application and Israeli application no. 122807 and is entitled to the earliest filing date.

The Wu et al. '198 patent does not disclose, teach or suggest all of the features of the presently claimed invention. The Wu et al. '198 patent discloses a dental modeling simulator that operates by measuring molded impressions of teeth on a support table, the support table defining an X-Y plane. A laser probe detects Z-axis measurements in a first position; the molded impression is then tilted and the measuring process is repeated to obtain theretofore hidden measurements. A virtual three-dimensional model is thus produced.

Among other things, independent claim 27 recites a method for selecting orthodontic components comprising "generating a prescription for orthodontic treatment including specifying the type of components used based on the components of the virtual treatment."

In contrast to the presently claimed invention, the Wu et al. '198 patent is completely silent as to a step of "generating a prescription for orthodontic treatment including specifying the type of components used based on the components of the virtual treatment" as recited in independent claim 27. The Wu et al. '198 patent is directed toward modeling of a patient's teeth rather than diagnosis of problems and *prescriptions* of solutions for those problems. Thus, by itself, the Wu et al. '198 patent does not disclose, teach or suggest all of the features recited in independent claim 27 of the present application because the focus of the Wu et al. '198 patent is narrowly directed toward three-dimensional modeling.

Similarly, the Wu et al. '198 patent does not disclose, teach or suggest all of the features

recited in independent claim 50.

Among other things, independent claim 50 recites a method for selecting real-life orthodontic components for use in an orthodontic treatment of an individual comprising “selecting a virtual set of orthodontic components representing real-life orthodontic components that may be used in an orthodontic treatment, said virtual set of components simulating the components of said real-life set....”

In contrast to the presently claimed invention, the Wu et al. ‘198 patent does not disclose, teach or suggest a step of “selecting a virtual set of orthodontic components representing real-life orthodontic components that may be used in an orthodontic treatment, said virtual set of components simulating the components of said real-life set....” as recited in independent claim 50. Again, the Wu et al. ‘198 patent is directed toward modeling of a patient’s teeth rather than diagnosis of problems and prescriptions of solutions for those problems. Thus, by itself, the Wu et al. ‘198 patent does not disclose, teach or suggest all of the features recited in independent claim 50 of the present application because the focus of the Wu et al. ‘198 patent is narrowly directed toward three-dimensional modeling.

Accordingly, Applicants respectfully request that the Examiner allow independent claims 27 and 50 and allow all claims dependent thereon by reconsidering and withdrawing the rejection of these claims as being obvious over the cited prior art.

**2. Doyle et al (US 5,879,158) in view of Wu et al (US 5,338,198)**

The Examiner rejected claims 27 – 49 as being unpatentable over the Doyle et al. ‘158 patent in view of the Wu et al. ‘198 patent.

### **Response**

By this Response, Applicant respectfully traverses the Examiner's rejection since all of the features of the presently claimed invention are not disclosed, taught or suggested in the cited prior art combination.

Claim 27 recites: "[a] method for selecting orthodontic components for use in an orthodontic treatment of an individual, the method comprising: (i) in a computer: (a) selecting a virtual set of orthodontic components representing components that may be used in an orthodontic treatment, (b) providing a first virtual three-dimensional (3D) image of a 3D model of the individual's teeth comprising teeth of at least one jaw, the model being manipulable so as to allow its viewing from a desired direction, (c) associating the virtual set of components with the teeth in said virtual image in a manner resembling that in which such components are associated with teeth in an orthodontic treatment, to obtain a second image of said 3D model with said components associated therewith, and (d) using a set of rules, including at least one rule, defining the effect of said set of components on said teeth, computing the manner of movement of the teeth as a result of said effect, so as to obtain a third image comprising the teeth model following the virtual treatment; and (ii) generating a prescription for orthodontic treatment including specifying the type of components used based on the components of the virtual treatment."

The method disclosed in the Doyle '198 patent is based on the following steps (see for example, on col. 3 lines 8-26 and a more detailed explanation in col. 6 line 18 to col. 10 line 34): displaying a center axis of each tooth in the set of teeth, wherein the center axis extends between a root portion and a crown portion of the tooth; determining differences between the position and orientation of the center axis of each tooth and torque, tip and angulation values for each tooth representing a desired position and orientation of the tooth for a selected set of orthodontic brackets; determining differences between the

digitized three dimensional video image and a statistically average tooth for each tooth; determining an optimum position of each bracket on an associated tooth for moving the tooth to the desired position and orientation; determining a size and shape of a positioning jig for each bracket and tooth combination for optimum positioning of each bracket on a respective tooth for moving the tooth to the desired position and orientation; attaching each jig to an associated bracket and installing each jig and bracket combination on a respective tooth in said optimum position; removing each jig from its associated bracket; and attaching an archwire to the brackets.”

The Doyle method involves the determination, for each tooth, of a "bracket sighting point" or BSP, which is a virtual and theoretical point that represent the center axis of the tooth (see step 17 in Fig. 3a, col. 6 lines 21-41). The Doyle method further involves the presentation of an archwire and the positioning of the archwire in a plane that is defined theoretically by leveling the BSP for each tooth so that each of the BSP's in a jaw are common to a plane (see col. 6 lines 54-59). The Doyle method further involves, for each tooth, the positioning of the bracket onto the archwire. In order to overcome the differences between the theoretical, calculated positioning of the brackets (i.e. the BSPs) and the resultant positioning of the brackets on the archwire, a "fine-tuning" is carried out which involves calculations based on the following data: statistical information (e.g. the data relating to a "statistically average" tooth) (see Fig. 12 and text in col. 7 lines 42-50); the measured data (i.e. the data corresponding to the specific patient's tooth); information relating to the specific bracket in use (e.g. torque information).

In contrast to the presently claimed invention, the cited prior art combination does not disclose, teach or suggest “using a set of rules, including at least one rule, defining the effect of said set of components on said teeth, computing the manner of movements of the teeth as a result of said effect, so as to obtain a third image comprising the teeth model following the virtual treatment” as recited in claim

27. There is simply no disclosure, teaching or suggestion of the computation of the manner of movement of each tooth with the bracket associated therewith but rather the computation of a model of the movement of a theoretical, statistic tooth and "fine tuning" of this model based on information relating to the specific patient, specific bracket and specific archwire that are used.

Furthermore, the cited prior art combination does not disclose, teach or suggest "associating the virtual set of components with the teeth in said virtual image in a manner resembling that in which such components are associated with teeth in an orthodontic treatment, to obtain a second image of said 3D model with said components associated therewith," as recited in claim 27. The cited prior art combination is silent as to the association of the brackets with the teeth in order to compute the movements of the teeth, as the outcome of Doyle's virtual treatment is calculated at first based on the theoretical BSP's and other theoretical and statistical data, and only afterwards by considering data relating to the specific archwire and brackets in use.

In particular, Doyle does not disclose selecting, for a jaw, brackets and an archwire; associating the brackets with the teeth of the jaw and using a set of rules including a rule that requires each slot to engage the wire, for the computing the manner of movement of each tooth with the bracket associated therewith.

Thus, the Doyle et al. '158 patent combined with the Wu et al. '198 patent does not disclose, teach, or suggest the features recited in claim 27 or in the claims depending therefrom.

In particular, and referring to claim 28, Doyle et al does not disclose nor suggest this claim. While Doyle discloses a number "loops", these do not relate to altering and repeating steps (a), (b) or (c) of claim 28. Rather, these loops relate to comparisons made between the axial line of the tooth with other parameters – there is no suggestion or disclosure of changing the selection of orthodontic



component (in contrast to step (a)), or of modifying the 3D teeth image (in contrast to step (b)), or modifying the rules (in contrast to step (c)). Thus, claim 28 is not rendered obvious by the cited references.

Accordingly, Applicants respectfully requests that the Examiner reconsider and withdraw the rejection.

**3. The Doyle et al. '158 patent in view of the Wu et al '198 patent in view of the Guess et al. Publication**

The Examiner rejected claims 50 – 54 as being unpatentable over the Doyle et al. '158 patent in view of the Wu et al. '198 patent and the Guess et al. publication.

**Response**

By this Response, Applicant respectfully traverses the Examiner's rejection since all of the features of the presently claimed invention are not disclosed, taught or suggested by the cited prior art combination. The arguments above with respect to the Doyle et al. '158 patent in view of the Wu et al. '198 patent are incorporated by reference.

Claim 50 recites: [a] method for selecting real-life orthodontic components for use in an orthodontic treatment of an individual, the method comprising: (i) in a computer: (a) selecting a virtual set of orthodontic components representing real-life orthodontic components that may be used in an orthodontic treatment, said virtual set of components simulating the components of said real-life set, (b) providing a first virtual three-dimensional (3D) image of a 3D model of the individual's teeth comprising teeth of at least one jaw, the model being manipulable so as to allow its viewing from a desired direction, (c) associating the virtual set of components with the teeth in said virtual

image in a manner resembling that in which such components are associated with teeth in an orthodontic treatment, to obtain a second image of said 3D model with said components associated therewith, and (d) using a set of rules, including at least one rule, defining the effect of said set of components on said teeth, computing the manner of movement of the teeth as a result of said effect, so as to obtain a third image comprising the teeth model following the virtual treatment; and (ii) repeating step (i) a plurality of times until said substep (d) provides a desired result of the virtual treatment, wherein each time step (i) is repeated at least one of the following is changed: - (A) in step (a) at least one said orthodontic components is changed for a different orthodontic component; (B) in step (b) said association of at least one said orthodontic component with respect to a tooth in said virtual image is changed with respect to the preceding association.”

The Guess et al. publication does not cure the deficiencies of the cited primary prior art references. The Guess et al. publication discloses that bracket prescriptions could be accomplished through telecommunication to a manufacturer, which would use CAD/CAM to produce optimal torque, tip and base designs based on the physiology and desired tooth movements for a patient.

In contrast to the presently claimed invention, the cited prior art combination does not disclose, teach or suggest that “wherein each time step (i) is repeated at least one of the following is changed: - (A) in step (a) at least one said orthodontic components is changed for a different orthodontic component; (B) in step (b) said association of at least one said orthodontic component with respect to a tooth in said virtual image is changed with respect to the preceding association” as recited in claim 50. Thus, the present invention, as currently claimed in claims 27-54, is patentably distinguishable from the cited references.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejections.

### CONCLUSION

In light of the foregoing, Applicants submit that the application is now in condition for allowance. If the Examiner believes the application is not in condition for allowance, Applicants respectfully request that the Examiner contact the undersigned attorney if it is believed that such contact will expedite the prosecution of the application.

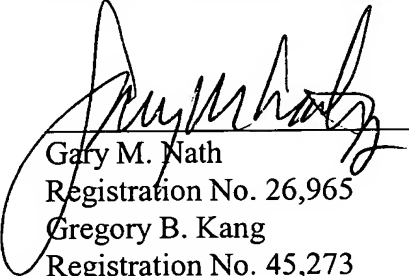
In the event this paper is not timely filed, Applicants petition for an appropriate extension of time. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 14-0112.

Respectfully submitted,

**NATH & ASSOCIATES PLLC**

Date: May 25, 2005  
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Appl. No. 10/749,388  
Reply to Office Action of Feb. 23, 2006  
Attorney Docket No. 25306y

## APPENDIX

## PATENT COOPERATION TREATY

PCT

INFORMATION CONCERNING ELECTED  
OFFICES NOTIFIED OF THEIR ELECTION

(PCT Rule 61.3)

From the INTERNATIONAL BUREAU

To:

REINHOLD COHN AND PARTNERS  
P.O Box 4060  
61040 Tel Aviv  
ISRAËL**RECEIVED**

30 -08- 1999

REINHOLD COHN &amp; PARTNERS

Date of mailing (day/month/year) 17 August 1999 (17.08.99)		
Applicant's or agent's file reference 110967.7 RS		IMPORTANT INFORMATION
International application No. PCT/IL98/00593	International filing date (day/month/year) 07 December 1998 (07.12.98)	Priority date (day/month/year) 30 December 1997 (30.12.97)
Applicant CADENT LTD. et al		

1. The applicant is hereby informed that the International Bureau has, according to Article 31(7), notified each of the following Offices of its election:

AP : GH, GM, KE, LS, MW, SD, SZ, UG, ZW

EP : AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

National : AU, BG, BR, CA, CN, CZ, DE, GB, IL, JP, KP, KR, MN, NO, NZ, PL, RO, RU, SE, SK, US

2. The following Offices have waived the requirement for the notification of their election; the notification will be sent to them by the International Bureau only upon their request:

EA : AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

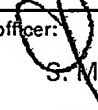
OA : BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

National : AL, AM, AT, AZ, BA, BB, BY, CH, CU, DK, EE, ES, FI, GD, GE, GH, GM, HR, HU, ID, IN, IS, KE, KG, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MW, MX, PT, SD, SG, SI, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW

3. The applicant is reminded that he must enter the "national phase" before the expiration of 30 months from the priority date before each of the Offices listed above. This must be done by paying the national fee(s) and furnishing, if prescribed, a translation of the international application (Article 39(1)(a)), as well as, where applicable, by furnishing a translation of any annexes of the international preliminary examination report (Article 36(3)(b) and Rule 74.1).

Some offices have fixed time limits expiring later than the above-mentioned time limit. For detailed information about the applicable time limits and the acts to be performed upon entry into the national phase before a particular Office, see Volume II of the PCT Applicant's Guide.

The entry into the European regional phase is postponed until 31 months from the priority date for all States designated for the purposes of obtaining a European patent.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer:  S. Mafla
Facsimile No. (41-22) 740.14.35	Telephone No. (41-22) 338.83.38

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

# PCT

To:

REINHOLD COHN AND PARTNERS  
P.O. Box 4060  
61040 Tel-Aviv  
ISRAEL

**RECEIVED**

18-08-1999

REINHOLD COHN & PARTNERS

## NOTIFICATION OF RECEIPT OF DEMAND BY COMPETENT INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

(PCT Rules 59.3(e) and 61.1(b), first sentence  
and Administrative Instructions, Section 601(a))

Date of mailing  
(day/month/year)

13.08.99

Applicant's or agent's file reference

110967.7 RS

### IMPORTANT NOTIFICATION

International application No.

PCT/IL 98/00593

International filing date (day/month/year)

07/12/1998

Priority date (day/month/year)

30/12/1997

Applicant

CADENT LTD. et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority considers the following date as the date of receipt of the demand for international preliminary examination of the international application:

13/07/1999

2. This date of receipt is:

- ☒ the actual date of receipt of the demand by this Authority (Rule 61.1(b)).  
☐ the actual date of receipt of the demand on behalf of this Authority (Rule 59.3(e)).  
☐ the date on which this Authority has, in response to the invitation to correct defects in the demand (Form PCT/IPEA/404), received the required corrections.

3. ☐ **ATTENTION:** That date of receipt is **AFTER** the expiration of 19 months from the priority date. Consequently, the election(s) made in the demand does (do) not have the effect of postponing the entry into the national phase until 30 months from the priority date (or later in some Offices) (Article 39(1)). Therefore, the acts for entry into the national phase must be performed within 20 months from the priority date (or later in some Offices) (Article 22). For details, see the *PCT Applicant's Guide*, Volume II.

- ☐ (If applicable) This notification confirms the information given by telephone, facsimile transmission or in person on:

4. Only where paragraph 3 applies, a copy of this notification has been sent to the International Bureau.

Name and mailing address of the IPEA/



European Patent Office  
D-80293 Munich  
Tel. (+49-89) 2399-0, Tx: 523656 epmu d  
Fax: (+49-89) 2399-4465

Authorized officer

Daniela Gran

Telephone No.

26 33

The demand must be filed directly with the competent International Preliminary Examining Authority or, if two or more Authorities are chosen by the applicant. The full name or two-letter code of that Authority may be indicated by the applicant on the line

IPEA/ EP

By fax: 0049892399 4465  
(4 Pages)

# PCT DEMAND

## CHAPTER II

under Article 31 of the Patent Cooperation Treaty:  
The undersigned requests that the international application specified below be the subject of international preliminary examination according to the Patent Cooperation Treaty and hereby elects all eligible States (except where otherwise indicated).

For International Preliminary Examining Authority use only			
Identification of IPEA		Date of receipt of DEMAND	
<b>Box No. I IDENTIFICATION OF THE INTERNATIONAL APPLICATION</b>		Applicant's or agent's file reference 110967.7 RS	
International application No. PCT/IL98/00593	International filing date (day/month/year) 07 December 1998 ( 07.12.1998 )	(Earliest) Priority date (day/month/year) 30 December 1997 ( 30.12.1997 )	
Title of invention VIRTUAL ORTHODONTIC TREATMENT			
<b>Box No. II APPLICANT(S)</b>			
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) CADENT LTD. 14 Hamelacha Street Or Yehuda 60372 Israel		Telephone No.:	
		Facsimile No.:	
		Teleprinter No.:	
State (that is, country) of nationality: IL		State (that is, country) of residence: IL	
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) TAUB, Eldad 11 Topaz Street Reut 71908 Israel			
State (that is, country) of nationality: IL		State (that is, country) of residence: IL	
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) KOPELMAN, Avi 8 Ido Street Ramat-Chen 52233 Israel			
State (that is, country) of nationality: IL		State (that is, country) of residence: IL	
<input type="checkbox"/> Further applicants are indicated on a continuation sheet.			

**Box No. III AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE**The following person is ☒ agent ☐ common representativeand ☒ has been appointed earlier and represents the applicant(s) also for international preliminary examination.☐ is hereby appointed and any earlier appointment of (an) agent(s) /common representative is hereby revoked.☐ is hereby appointed, specifically for the procedure before the International Preliminary Examining Authority, in addition to the agent(s)/common representative appointed earlier.Name and address: *(Family name followed by given name; for a legal entity, full official  
The address must include postal code and name of country.)*

REINHOLD COHN AND PARTNERS

P.O.B. 4060

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Telephone No.:

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Teleprinter No.:

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☐ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.**Box No. IV BASIS FOR INTERNATIONAL PRELIMINARY EXAMINATION****Statement concerning amendments:\***

1. The applicant wishes the international preliminary examination to start on the basis of:

☒ the international application as originally filed.the description ☐ as originally filed☐ as amended under Article 34the claims ☐ as originally filed☐ as amended under Article 19 (together with any accompanying statement)☐ as amended under Article 34the drawings ☐ as originally filed☐ as amended under Article 342. ☐ The applicant wishes any amendment to the claims under Article 19 to be considered as reversed.3. ☐ The applicant wishes the start of the international preliminary examination to be postponed until the expiration of 20 months from the priority date unless the International Preliminary Examining Authority receives a copy of any amendments made under Article 19 or a notice from the applicant that he does not wish to make such amendments (Rule 69.1(d)). *(This check-box may be marked only where the time limit under Article 19 has not yet expired.)*

\* Where no check-box is marked, international preliminary examination will start on the basis of the international application as originally filed or, where a copy of amendments to the claims under Article 19 and/or amendments of the international application under Article 34 are received by the International Preliminary Examining Authority before it has begun to draw up a written opinion or the international preliminary examination report, as so amended.

Language for the purposes of international preliminary examination: **ENGLISH**☒ which is the language in which the international application was filed.☐ which is the language of a translation furnished for the purposes of international search.☒ which is the language of publication of the international application.☐ which is the language of the translation (to be) furnished for the purposes of international preliminary examination.**Box No. V ELECTION OF STATES**The applicant hereby elects all eligible States *(that is, all States which have been designated and which are bound by Chapter II of the PCT)*

excluding the following States which the applicant wishes not to elect:



**Box No. VI CHECK LIST**

The demand is accompanied by the following elements, in the language referred to in Box No. IV, for the purposes of international preliminary examination:

- |   |   |        |
|---|---|--------|
| 1. translation of international application                             | : | sheets |
| 2. amendments under Article 34  | : | sheets |
| 3. copy (or where required, translation) of amendments under Article 19 | : | sheets |
| 4. copy (or, where required, translation) of statement under Article 19 | : | sheets |
| 5. letter   | : | sheets |
| 6. other (specify)  | : | sheets |

For International Preliminary  
Examining Authority use only

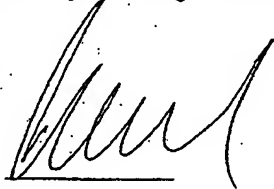
- | received                 | not received             |
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| <input type="checkbox"/> | <input type="checkbox"/> |
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The demand is also accompanied by the item(s) marked below:

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> fee calculation sheet                             | 4. <input type="checkbox"/> statement explaining lack of signature                                  |
| 2. <input type="checkbox"/> separate signed power of attorney                            | 5. <input type="checkbox"/> nucleotide and or amino acid sequence listing in computer readable form |
| 3. <input type="checkbox"/> copy of general power of attorney; reference number, if any: | 6. <input type="checkbox"/> other (specify):  |

**Box No. VII SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE**

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the demand).



COHN Ilan  
Agent for REINHOLD COHN AND PARTNERS

For International Preliminary Examining Authority use only

1. Date of actual receipt of DEMAND:

2. Adjusted date of receipt of demand due to CORRECTIONS under Rule 60.1(b):

3. ☐ The date of receipt of the demand is AFTER the expiration of 19 months from the priority date and item 4 or 5, below, does not apply.

☐ The applicant has been informed accordingly.

4. ☐ The date of receipt of the demand is WITHIN the period of 19 months from the priority date as extended by virtue of Rule 80.5.

5. ☐ Although the date of receipt of the demand is after the expiration of 19 months from the priority date, the delay in arrival is EXCUSED pursuant to Rule 82.

For International Bureau use only

Demand received from IPBA on:

## PCT

## FEE CALCULATION SHEET

Annex to the Demand for international preliminary examination

International application No. <b>PCT/IL 98/00593</b>	For International Preliminary Examining Authority use only									
Applicant's or agent's file reference <b>110967.7 RS</b>	Date stamp of the IPEA									
Applicant <b>CADENT LTD.</b>										
<b>Calculation of prescribed fees</b>										
1. Preliminary examination fee .....	<div style="border: 1px solid black; padding: 2px; display: inline-block;">DM 2,998.29 P</div>									
2. Handling fee ( <i>Applicants from certain States are entitled to a reduction of 75% of the handling fee. Where the applicant is (or all applicants are) so entitled, the amount to be entered at H is 25% of the handling fee.</i> ) .....	<div style="border: 1px solid black; padding: 2px; display: inline-block;">DM 289.46 H</div>									
3. Total of prescribed fees Add the amounts entered at P and H and enter total in the TOTAL box .....	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">DM 3,287.75</div>  <b>TOTAL</b> </div>									
<b>Mode of Payment</b>										
<table style="width: 100%;"> <tr> <td><input checked="" type="checkbox"/> authorization to charge deposit account with the IPEA (see below)</td> <td><input type="checkbox"/> cash</td> </tr> <tr> <td><input type="checkbox"/> cheque</td> <td><input type="checkbox"/> revenue stamps</td> </tr> <tr> <td><input type="checkbox"/> postal money order</td> <td><input type="checkbox"/> coupons</td> </tr> <tr> <td><input type="checkbox"/> bank draft</td> <td><input type="checkbox"/> other (specify):</td> </tr> </table>			<input checked="" type="checkbox"/> authorization to charge deposit account with the IPEA (see below)	<input type="checkbox"/> cash	<input type="checkbox"/> cheque	<input type="checkbox"/> revenue stamps	<input type="checkbox"/> postal money order	<input type="checkbox"/> coupons	<input type="checkbox"/> bank draft	<input type="checkbox"/> other (specify):
<input checked="" type="checkbox"/> authorization to charge deposit account with the IPEA (see below)	<input type="checkbox"/> cash									
<input type="checkbox"/> cheque	<input type="checkbox"/> revenue stamps									
<input type="checkbox"/> postal money order	<input type="checkbox"/> coupons									
<input type="checkbox"/> bank draft	<input type="checkbox"/> other (specify):									
<b>Deposit Account Authorization</b> ( <i>this mode of payment may not be available at all IPEAs</i> )										
The IPEA/ <u>EP</u> <input checked="" type="checkbox"/> is hereby authorized to charge the total fees indicated above to my deposit account.										
<input type="checkbox"/> ( <i>this check-box may be marked only if the conditions for deposit accounts of the IPEA so permit</i> ) is hereby authorized to charge any deficiency or credit any overpayment in the total fees indicated above to my deposit account.										
28450022 Deposit Account Number	<u>13.07.1999</u> Date (day/month/year)	<u>Rachel Shree</u> Signature								

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